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The diagram illustrates a system architecture for managing advertisements. At the top, three main components are shown: "USER INTERFACE SETUP CLIENT" (201), "ADVERTISEMENTS DISPLAY MANAGER" (210), and "SCREEN SAVER SUBSYSTEM" (220). These are connected to a central "INTERAD DATABASE" (230). The "INTERAD DATABASE" is also connected to an "ADVERTISEMENT 'KILLER'" (275) and a "SCHEDULER FOR SOUND ADS, WALLPAPERS ETC." (265). Below the database, there are two parallel paths: one through a "FEEDBACK MANAGER" (240) to "INTERNET FEEDBACK" (260), and another through an "ADVERTISEMENTS FEEDER" (250) to "INTERNET AD FEEDER" (270). Both feeders connect to a "TCP/IP POLITE AGENT" (280). This agent connects to a "TCP/IP PROTOCOL STACK" (290), which then connects to a "PPP-TCP/IP OVER MODEM PROTOCOL" (295). Finally, this protocol connects to the "INTERNET" (700), represented by a dashed oval. A separate path from the "ADVERTISEMENTS FEEDER" (250) goes through "ANOTHER SOURCE FEEDER" (271) and "ANOTHER TYPE OF POLITE AGENT" (272) to a set of "POLITE AGENT JOB"s (285). These jobs are grouped under a bracket labeled 286.

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graph TD; 201[USER INTERFACE SETUP CLIENT] --> 230[INTERAD DATABASE]; 210[ADVERTISEMENTS DISPLAY MANAGER] --> 230; 220[SCREEN SAVER SUBSYSTEM] -.-> 230; 230 --> 275[ADVERTISEMENT "KILLER"]; 230 --> 265[SCHEDULER FOR SOUND ADS, WALLPAPERS ETC.]; 230 --> 240[FEEDBACK MANAGER]; 230 --> 250[ADVERTISEMENTS FEEDER]; 240 --> 260[INTERNET FEEDBACK]; 250 --> 270[INTERNET AD FEEDER]; 260 --> 280[TCP/IP POLITE AGENT]; 270 --> 280; 280 --> 290[TCP/IP PROTOCOL STACK]; 290 --> 295[PPP-TCP/IP OVER MODEM PROTOCOL]; 295 <--> 700((INTERNET)); 250 --> 271[ANOTHER SOURCE FEEDER]; 271 --> 272[ANOTHER TYPE OF POLITE AGENT]; 272 --> 285_1[POLITE AGENT JOB]; 285_1 --- 285_2[POLITE AGENT JOB]; 285_2 --- 285_3[POLITE AGENT JOB]; 285_1 & 285_2 & 285_3 --- 286[ ]
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Methods and apparatus are provided for selecting advertisements (50) and other information from a computer network database (730) based on user defined preferences and transmitting the selected advertisement in background mode over a communications link (703) between the computer network (700) and a local computer (500) with minimal interference with other processes (285) communicating over the communications link (703). This method includes monitoring the communications link (703) and transmitting portions of the advertisement (50) when the communications link line utilization is below a preestablished threshold. Methods and apparatus are also provided for displaying or otherwise presenting the selected advertisements on the user's computer. Additional methods and apparatus are provided for selecting and presenting information stored on a local storage media (230) based on user defined preferences.

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INTERNATIONAL SEARCH REPORT

int. application no.
PCT/IB96/00829

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : G06F 13/00, 13/36

US CL : 395/200.09, 200.13; 370/229, 230, 232, 235; 348/10, 522

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 395/200.01, 200.09, 200.11, 200.13; 370/229, 230, 232, 235; 348/10, 522

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

APS

search terms: utilization rate, threshold, advertisement, customization

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,220,564 A (TUCH et al.) 15 June 1993, abstract; col.1, lines 50-68; col.4, lines 3-68; col.5, lines 22-51.	1,3 ----- 7, 9 - 10, 12 - 13, 15-16
X --E Y	US 5,604,542 A (DEDRICK) 18 February 1997, the entire document.	5,8 ----- 7, 9 - 10, 12 - 1 3, 15-16
X --E Y	US 5,600,364 A (HENDRICKS et al.) 04 February 1997, abstract; fig.11-12, 18-19, 21; col.29, line 30 - col.31, line 63; col.34, line 40 - col.39, line 53.	5,8 ----- 7, 9 - 10, 12 - 1 3, 15-16

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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16 APRIL 1997

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08 MAY 1997

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,283,639 A (ESCH et al.) 01 February 1994, the entire document.	5,8 ----- 7,9-10,12-13,15-16
X --- Y	US 5,412,416 A (NEMIROFSKY) 02 May 1995, the entire document.	5,8 ----- 7,9-10,12-13,15-16
A	US 5,099,420 A (BARLOW et al.) 24 March 1992, the entire document.	1-16